Re-write the claims as set forth below. This listing of claims will replace all prior versions and listings, of claims in the application:

Listing of Claims:

1. (Currently amended): In a computer system comprising a host in communication with a graphics processor, a method for the graphics processor to store state data in a buffer residing in the graphics processor, the method comprising:

receiving and storing N sets of state data [[to]] in the buffer, where the total length of the N sets of state data does not exceed a length of the buffer, and wherein at least one set of the N sets of state data is used to process graphics primitives; and

prohibiting an additional set of state data from being stored in the buffer when N equals a maximum number of allowed states.

2. (Original): The method of claim 1, wherein the maximum number of allowed states is two.

3. (Original): The method of claim 1, further comprising:

determining that M sets of state data of the N sets of state data are no longer being used to process the graphics primitives before writing the additional set of state data to the buffer, wherein M ≤N; and

permitting the additional set of state data to be stored in the buffer when the M sets of state data are no longer being used to process the graphics primitives.

4. (Currently amended): The method of claim 1, wherein the buffer comprises either [[of]] a code buffer [[and]] or a constant buffer.

7

5.   (Original): In a computer system comprising a host in communication with a graphics processor, a method for the host to update state data in a buffer residing in the graphics processor, the method comprising:

writing N sets of state data to the buffer, where the total length of the N sets of state data does not exceed a length of the buffer, and where at least one set of the N sets of state data is used to process graphics primitives;

determining whether a length of an additional set of state data would exceed available space in the buffer; and

when the length of the additional set of state data exceeds the available space in the buffer, waiting until M sets of state data of the N sets of state data are no longer being used to process the graphics primitives before writing the additional set of state data to the buffer, wherein M $\leq$N and each of the M sets of state data would be at least partially overwritten by the additional set of state data.

6.   (Original): The method of claim 5, wherein the buffer is a ring buffer and the available space in the buffer is the difference between the length of the buffer and the total length of the N sets of state data.

7.   (Original): The method of claim 5, wherein N is two.

8.   (Original): The method of claim 7, wherein waiting further comprises waiting until all N sets of state data are no longer being used to process the graphics primitives.

9.   (Original): The method of claim 5, wherein waiting further comprises sending a flush command to the graphics processor that causes the graphics processor to refuse the additional set of state data until at least one set of the N sets of state data is no longer being used to process the graphics primitives.

10.   (Currently amended): The method of claim 5, wherein the buffer comprise either [[of]] a code buffer [[and]] or a constant buffer.

11.   (Original): A computer-readable medium having stored thereon computer-executable instructions for performing the method of claim 5.

12.   (Original): The computer-readable medium of claim 11, wherein the computer-readable instructions are embodied in a graphics processing driver residing in the host.

13.   (Original): A graphics processing circuit comprising:

means for receiving and storing N sets of state data [[to]] in the buffer, where the total length of the N sets of state data does not exceed a length of the buffer, and wherein at least one set of the N sets of state data is used to process graphics primitives; and

means for prohibiting an additional set of state data from being stored in the buffer when N equals a maximum number of allowed states.

14.   (Original): The apparatus of claim 13, wherein the maximum number of allowed states is two.

15.   (Original): The apparatus of claim 13, further comprising:

9

means for determining that M sets of state data of the N sets of state data are no longer being used to process the graphics primitives, wherein M $\leq$ N; and

means for permitting the additional set of state data to be stored in the buffer when the M sets of state data are no longer being used to process the graphics primitives.

16.   (Original): In a computer systems comprising a host that provides graphics via a display, wherein the host is in communication with a graphics processor to assist in processing of the graphics, a host-implemented apparatus for updating state data in a buffer residing in the graphics processor, the apparatus comprising:

means for writing N sets of state data to the buffer, where the total length of the N sets of state data does not exceed a length of the buffer, and where at least one set of the N sets of state data is used to process graphics primitives to be displayed on the display;

means for determining whether a length of an additional set of state data would exceed available space in the buffer; and

means, coupled to the means for determining, for waiting until M sets of state data of the N sets of state data are no longer being used to process the graphics primitives before writing the additional set of state data to the buffer when the length of the additional set of state data exceeds the available space in the buffer, wherein M $\leq$ N and each of the M sets of state data would be at least partially overwritten by the additional set of state data.

17.   (Original): The apparatus of claim 16, wherein the buffer is a ring buffer and the available space in the buffer is the difference between the length of the buffer and the total length of the N sets of state data.

18.   (Original): The apparatus of claim 16, wherein N is two.

10

19.   (Original): The apparatus of claim 18, wherein the means for waiting waits until all N sets of state data are no longer being used to process the graphics primitives.